

Decibel Levels of Common Sounds

Painful

150 dB = rock music peak

140 dB = firearms, air raid siren, jet engine

130 dB = jackhammer

120 dB = jet plane take-off, amplified rock music at 4-6 ft., car stereo, band practice

Extremely Loud

110 dB = rock music, model airplane

106 dB = timpani and bass drum rolls

100 dB = snowmobile, chain saw, pneumatic drill

90 dB = lawnmower, shop tools, truck traffic, subway

Very Loud

80 dB = alarm clock, busy street

70 dB = busy traffic, vacuum cleaner

60 dB = conversation, dishwasher

Moderate

50 dB = moderate rainfall

40 dB = quiet room

Faint

30 dB = whisper, quiet library

Hazardous Noise

Sounds louder than 80 decibels are considered potentially dangerous. Both the amount of noise and the length of time of exposure determine the amount of damage. Hair cells of the inner ear and the hearing nerve can be damaged by an intense brief impulse, like an explosion, or by continuous and/or repeated exposure to noise.

Examples of noise levels considered dangerous by experts are a lawnmower, a rock concert, firearms, firecrackers, headset listening systems, motorcycles, tractors, household appliances (garbage disposals, blenders, food processors/choppers, etc.) and noisy toys. All can deliver sound over 90 decibels and some up to 140 decibels.

From www.asha.org (American Speech-Language-Hearing Association)

The **decibel (dB)** is a logarithmic unit of measurement that expresses the magnitude of a physical quantity (usually power or intensity) relative to a specified or implied *reference level*. Since it expresses a ratio of two quantities with the same unit, it is a dimensionless unit. A decibel is one tenth of a **bel (B)**.

The bel was originally devised by engineers of the Bell Telephone Laboratories to quantify the reduction in audio level over a 1 mile (approximately 1.6 km) length of standard telephone cable. It was originally called the *transmission unit* or *TU*, but was renamed in 1923 or 1924 in honor of the Bell System's founder and telecommunications pioneer Alexander Graham Bell. In many situations, however, the bel proved inconveniently large, so the decibel has become more common.

-Wikipedia